

USDA Foreign Agricultural Service

# GAIN Report

Global Agricultural Information Network

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY  
USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT  
POLICY

Voluntary  Public

**Date:** 5/25/2011

**GAIN Report Number:** ID1121

## Indonesia

**Post:** Jakarta

### Indonesia Market Brief - Hardwood 2011

**Report Categories:**

Product Brief

**Approved By:**

Dennis Voboril

**Prepared By:**

Sativa Pekerti-Consultant & Jonn P. Slette

**Report Highlights:**

In 2009 the United States maintained about 40 percent of the market share for wood and forestry products imported into Indonesia out of a total \$82.9 million. Trends indicate that Indonesian end users of imported wood products will use more imported hardwoods. In 2010 U.S. hardwood, softwood, and wood product exports to Indonesia reached \$50.1 million, which was an increase of 51 percent over 2009. Furthermore, the Indonesian wood importers expect demand to grow by between 20-30 percent annually over the next five years. High quality U.S. lumber and veneers, particularly varieties like oak, maple, walnut, and ash will remain in high demand by Indonesian end users.

## **Executive Summary:**

Indonesia is the largest archipelago in the world with 17,508 islands and 187.8 million hectares (ha) of land area. According to the GOI forest land area covers around 71 percent or 132.4 million ha of the total land area, consisting of 29 percent reserve and protected forests, 31 percent production forests, and 30 percent non-forested areas. [1] Most illegal logging occurs in areas outside of the jurisdiction of the Ministry of Forestry (MOF), or outside of Indonesia's publically owned "forestry estate".

The forest area outside of the forestry estate consists of approximately 55.4 million ha of forested area. These lands are five times more likely to be logged illegally than those areas that are forest estate areas.

According to the MOF, the primary causes of estimated 1.2 million ha of forest land which are deforested annually in Indonesia is due to the rapid expansion of plantations for crops, small-holder subsistence agriculture, and pulpwood productions.

Indonesia's domestically produced timber goes for pulp and paper, sawn lumber, plywood, other wood working and furniture industries. The wood generally comes from the five main islands of Sumatra, Kalimantan, Java, Sulawesi, and Papua. Over the past five years the wood millers and plywood manufacturers in Sumatra, Kalimantan, and Java have decreased significantly in production. Industry sources cite lower supplies of raw materials, increased production costs, and stricter governmental policies as the primary reason for this decrease.

For Indonesian timber producers to meet international certification requirements, the logs must be produced under the Sustainable Forest Operation program, which causes local log prices to rise and become less affordable to processors. A decreased supply of local timber and competition from countries like China and Malaysia has led to significant closures of Indonesian sawn lumber (80%) and plywood (50%) manufactures.

Indonesian end users are switching as much as fifty percent from locally harvested natural tropical hardwoods to lumber from GOI controlled estate forests, community forests, and imported wood materials. Although U.S. hardwood exports to Indonesia remain relatively small (\$37 million in 2010), the American Hardwood Export Council (AHEC) [2] and the industries predict a 20 percent increase annually in the next three years. Indonesian end users also have expressed that more imports will occur because end users like particular characteristics of imported, temperate hardwoods, and because trends in design and consumer tastes in Indonesia reflect a growing preference for imported hardwoods.

## **Note:**

<sup>e</sup> Forest Estate area is managed by the Indonesian Ministry of Forestry (MOF). Data source: Ministry of Forestry 2009

[2] Source: Bisnis.com/Sektor Riil, "Impor kayu jenis hardwood dari AS melonjak", November 19, 2010

## **Market Situation**

### **Forest Outlook**

According to some international publications, illegal logging was responsible for the loss of 10 million ha of Indonesian tropical rainforest [3] in 2009, especially in Sumatra and Kalimantan. Critically degraded forest lands are abundant in Indonesia and if the status quo remains, some reports estimate that 52.9 million ha (95%) of non-forest estate and 53 million ha (40%) of forest estate will disappear by

2020.

Note:

[3] The Independent World UK, October 2009

Around 4 million ha of land are currently dedicated to timber production under Indonesia's industrial plantations (*Hutan Tanaman Industri* - HTI). The MOF plans to add an additional 5 million ha of *Albazia spp*, *Acacia spp*, and *Eucalyptus spp* by 2014 through HTI and community forest (HR – Hutan Rakyat). In 2010 the GOI restricted the harvest at each HTI forest estate to 800,000 CuM.

## Production

In 2003, the MOF reported that 1,881 wood manufactures operated in Indonesia. These consisted of 1,618 sawmills with an intake of 11.05 million CuM, 107 plywood manufactures with intake capacity of 9.43 million CuM, six large pulpwood processors with the intake capacity of 3.98 million CuM, and 151 woodworking firms with total capacity of 5.23 million CuM. In 2010 the MOF reported that only 120 sawn timber manufacturers and 45 plywood manufacturers remain active.

Table1. Indonesian 2008 Data of Production and Domestic Consumption, and Import and Export of All Softwood and Hardwood

Wood Product Type		Production Volume (00 CuM)	Domestic Consumption Volume (00 CuM)	Import		Export	
				Volume (000 M)	Value (Million \$)	Volume (00 CuM)	Value (Million \$)
Logs	Softwood	1,842	1,847	7	1.31	2	0.40
	Hardwood	34,150	34,133	53	15.53	70	8.89
		35,992	35,980	60	16.84	72	9.29
Sawn Wood	Softwood	0	124	155	61.23	32	12.44
	Hardwood	4,169	3,499	134	66.14	804	319.09
		4,169	3,623	289	127.37	835	331.52
Veneer	Softwood	64	71	13	11.01	6	17.11
	Hardwood	220	224	15	20.98	11	19.21
		284	295	28	31.99	17	36.32
Plywood	Softwood	790	45	39	12.39	783	492.34
	Hardwood	3,200	1,075	21	9.10	2,146	280.03
		3,990	1,120	60	21.49	2,929	772.37

\*Estimate Volume, Softwood: Coniferous; Hardwood: Non-Coniferous

Sources: ITTO - International Tropical Timber Organization and CIFOR - Center for International Forestry Research

The plywood and sawn lumber sectors rely on natural woods like Meranti (*Shorea spp.*), Merbau (*Intsia spp.*), Bangkirai (*Hopea spp.*), Suren (*Toona sureni*), Mindi (*Melia spp.*) and HTI woods such as Albasia (*Albazia spp.*), Rubberwood (*Hevea spp.*), Keruing (*Dipterocarpus spp.*), but over 50% on fruit trees from community forests like Durian (*Durio spp.*), Jackfruit and Cempedak (*Artocarpus spp.*), Melinjo (*Gnetum spp.*), Jengkol (*Pithecolobium spp.*). Furniture and woodworking sectors tend to prefer HTI and HR woods, mainly Teak (*Tectona grandis*), Mahogany (*Swietenia spp.*), Sonokeling (*Dalbergia latifolia*), Rain tree (*Enterolobium spp.*), Rubberwood (*Hevea spp.*), and Ebony (*Diospyros spp.*).

The annual consumption of teak for furniture making is around 1.2 million CuM (60%) of total wood

consumption of 2 million CuM. Mahogany consumption is 25 percent and pine 15 percent of total consumption for furniture manufacturers. Furniture manufacturers also use imported hardwoods because of the international demands that require certain species of wood.

Indonesian furniture and woodworking products primary export markets are North America (40%), Europe (33%), and Oceania and Asia (33%). The largest Indonesian furniture export market has historically been the United States, with an annual average of 28 percent and followed by Europe and Japan. The total export of each industry has reached 75 percent of previous year by mid-year 2010 (see Table 2.).

Table2. Indonesian Export Volume and Value on Furniture and Woodworking

Year	Woodworking		Furniture	
	Volume (Million CuM)	Value (Billion \$)	Volume (Tons)	Value (Billion \$)
2007	5.03	2.74	898,882	1.96
2008	4.63	2.59	825,539	1.95
2009	4.15	2.05	695,768	1.67
2010*	2.91	1.55	553,158	1.23

\*January-July 2010, Sources: ISWA - Indonesian Sawntimber and Woodworking Association, Asmino - Indonesia Furniture Industry & Handicraft Association, and Central Bureau of Statistic (BPS)

### Consumption and Main Consumers

In 2008, the Indonesian Central Bureau of Statistic (BPS) [4] reported the U.S. market share for oak was 37 percent (\$2.21 million) and cherry 44 percent (\$428,000). Maple was dominated by Canada with the market share of 45 percent followed by the United States at 21 percent (\$1.26 million) and China at 19 percent. Beech used in Indonesia mostly comes from Europe (60%), with only 2 percent was from the United States. The market share of ash from United States was 29 percent (\$585,610) while majority came from European countries of over 60 percent (\$1.23 million). Coniferous and cedar imports were 40 percent from the United States (\$29.59), 19 percent from German, 17 percent from New Zealand, and 24 percent from other European and Asian countries combined.

Note:

[4] The following estimate data in this paragraph was calculated for this report only from BPS. No 2009 and 2010 data available.

Table3. Indonesian Import Value of Hardwood and Softwood

Type of Wood and Species	Year 2008	Year 2009	Year 2010*
<b>Hardwood:</b> Baulk, Saw Log, Veneer log, Sawn Wood, Planed, Veneer, Poles, etc.	Value (Million USD)	Value (Million USD)	Value (Million USD)
Oak	5.97	16.58	19.27
Beech	2.43	1.67	0.98
Maple	5.90	4.05	3.21
Cherry	0.96	0.44	0.09
Ash	2.04	2.02	1.95
Others incl. Oak/Beech/Tropical woods	0.67	0.46	0.54

Others: Sawn Wood of other species	15.9	19.29	11.60
Total Hardwood	33.87	44.51	37.64
<b>Softwood: Planed, Veneer, etc.</b>			
Cedar and Coniferous	73.25	37.39	26.07
<b>TOTAL</b>	<b>107.12</b>	<b>81.90</b>	<b>63.71</b>

\*January-August 2010, Sources: Selected and calculated from Central Bureau of Statistic (BPS) data online.

Wood imports into Indonesia declined in 2008 and 2009 due to the international economic crisis, which lowered demand for finished Indonesian furniture and other wood products in the three largest export markets (the United States, Europe, and Japan). However, the Indonesian furniture sector is confident that the worst is over and that overseas consumers of Indonesian furniture are buying at increased levels. This is a contributing reason that Indonesian demand for imported hardwoods is on the rise.

Indonesia has six primary wood floor manufacturers which use imported wood materials. The largest company holds about 45 percent of the total market share, with the remaining five with over 50 percent. A variety of smaller companies constitute the remaining 5 percent. Their total production in 2009 was approximately 4 million M<sup>2</sup> and over 4.8 M<sup>2</sup> by October 2010. The value of imported wood used was \$39.48 million in 2009. In 2009 alone, a single company used 41,400 CuM of logs from Europe (oak and ash), 6,600 CuM of logs and 7,300 CuM of sawn timbers from the United States (oak, ash, maple and walnut).

Over 95 percent of the sawn timber was used for the flooring industry originated from the United States, with whole logs counting for only about 14 percent of market share. The 95 percent of these products are destined for the export market, with the remaining five percent going to the domestic market. A ten to fifteen percent annual increase is projected in the next five years due to the market recovery after the global economic crises.



Source: U.S. Foreign Trade Export Statistic at [www.census.gov](http://www.census.gov)

The total woodworking industries annual consumption of imported lumber is estimated over 50 containers by at least ten largest manufactures. A woodworking (door) company with a production

capacity of 250,000 pieces (\$22 million) produced entirely for export markets to Europe (>60 percent), Oceania (30 percent), and the United States (<10 percent). An average of 3,000 CuM (\$1.8 million) of lumber each year is imported from the United States (white and red oak) by one large manufacturer.

About 780,000 M<sup>2</sup> of veneer, valued at over \$1 million, is imported from the United States and Canada (85% of white oak), and China (15% of red oak). Indonesian industry uses 7,200 CuM of Pine (*Pinus spp.*) MDF from New Zealand and Rubber-wood particle board from either Thailand or Malaysia (3,000 CuM). The next five years the manufacturers expect 20 percent increase annually.

There are at least three large musical instruments manufactures produce grand and upright piano using local and imported hardwood from ebony, mahogany to walnut, cherry (*Prunus serotina*), and oak. Maple is used for action, bridges and pin blocks of 15-ply or 16-ply laminated wood. Spruce (*Picea spp.*) is uses for soundboard and ribs. Beams and back-post utilize laminated hardwood of any species.

Table4. Indonesian Export Volume and Value of Musical Instruments

Musical Instrument	Year 2008		Year 2009		Year 2010*	
	Volume (tons)	Value (Million USD)	Volume (tons)	Value (Million USD)	Volume (tons)	Value (Million USD)
Upright Piano	1,555	10.5	6,381	44.2	6,010	43.6
Grand Piano	3,402	32.2	2,068	19.7	1,940	20.2
Other String Musical Instruments incl. Guitar	1,859	37.9	1,805	36.3	1,419	28.9
Drum & Other Musical Instruments	1,824	14.4	1,328	10.8	1,091	9.41

\*January-August 2010, Sources: Central Beureau of Statistic (BPS)

Guitars in Indonesia are often made using solid spruce tops, solid mahogany backs and sides and rosewood fingerboards. Drums use mainly local plywood like Meranti (*Shorea spp.*). This industry imports specific wood species in the form of logs (over 6,900 CuM), sawn lumber (2,948 CuM) or veneer and processes them at their own facilities. International brand musical instruments are 90 percent for export to the United States, European and Asian markets. The export values climbed up between 62 and 76% on the second quarter of 2010 (see Table 4.). A ten percent increase is predicted each year in the next few years.

About 4,000 acoustic guitars are produced annually by roughly 500 small and medium sized enterprises (SME) in Central Java. Most of these guitars are produced for the domestic market and are typically made from local teak, mahogany, and ebony. Also, about 2,000 custom-made acoustic and electric guitars and basses are produced annually by over 50 high-end home producers in urban areas. Electric guitar and bass production uses imported lumber from the United States, to include maple, alder (*Alnus spp.*) and ash about 200 CuM. Last year, electric guitar and bass producers also used about 30 M<sup>2</sup> of U.S. maple veneer. Last year the value of guitar production was estimated at over \$3.5 million and the industry expects an annual increase of up to 20 percent over the next three years due to more aggressive promotional activities.

According to the Indonesian Furniture Industry and Handicraft Association (ASMINDO), 2,000 furniture manufactures, including SMEs, depend on at least 2 CuM of local wood and 2.5 CuM of imported wood annually. Imported hardwood logs and lumber include oak, maple, birch (*Betula spp.*),

beech (*Fagus grandifolia*), ash, and softwoods. These imported wood products are used by the Indonesian end users to produce products designed to meet the requirements of the international market.

Although most medium-scale producers experienced a dramatic downturn in 2009 – often as much as 80 percent – 2010 exports rebounded and returned to what was described as normal. The main export market for Indonesian furniture and handicrafts includes the European Union, particularly the UK, Germany, France, and Spain (33-35%), followed by the United States (28%), Japan (10-12%), and Australia (2%). ASMINDO confidently expects annual growth rate over the next five years could be as high as 30 percent annually, due to improving global macroeconomic conditions and the expansion of new export markets to Latin America, the Middle East, Africa, and Eastern Europe.

Less than fifteen wood importers and furniture producers imported a wide range of lumber, veneer logs/veneer of different species (as listed on Appendix A) from the United States and Europe on regular bases over two decades. These companies have typically purchased U.S. veneers with certain specification either directly from the United States, Germany or Canada.

On average, the largest wood product importer annually purchased up to fifteen containers of U.S. white oak and walnut veneers (600,000 M<sup>2</sup>) valued at \$600,000 and two containers from other countries. The U.S. market share for veneer is 90 percent while Europe supplies the remaining 10 percent. A ten percent of annual growth is highly expected through 2015 due to the decreasing local wood sources and increasing demand of new style/design using particular species for overseas export markets.

Five modern contemporary furniture producers with the target markets 70 percent of retail and 20 percent of custom made products target offices, hotels/resorts, residences, and others. The average of productions per year is estimated of 15,500 pieces. They use imported oak and ash veneer at small quantity but mostly local wood and veneer like mahogany, sungkai (*Dysoxylum spp.*), and nyatoh (*Palaquium spp.*). The market is expected to grow 20-30 percent annually due to new opening outlets in major cities and new products lines/designs.

## **Preference**

The two most popular wood species used by wood flooring, door, panel, and other woodworking industries are white and red oak. Maple and oak veneers are in constant demand for musical instruments producers. Custom-made electric and acoustic guitars/basses serve higher income consumers.

High end furniture manufactures utilize any species of lumbers and veneers based on the latest design and trend that occur in international markets. The top two species of lumber and veneer are U.S. white oak and walnut. Other preferred veneers are European beech and ash, and African *Sapele*.

Teak remains in high demand by local and export markets for outdoor/indoor furniture industries, including SME.

U.S. veneers are more popular than European veneers with 90% market share, even though they are 10 – 15 percent more expensive than European veneers. The price that are deemed “affordable” by

Indonesian end users range of hardwood lumber is \$400 – 2,000 per CuM and veneer at \$1.00 – 1.25 per M<sup>2</sup>.

## Distribution

Imported logs, lumber, veneer logs, and veneers enter Indonesia directly through Jakarta’s main port and are then distributed by importers to distributors or directly to wood product manufactures (see Appendix B). On many occasions, U.S. veneer logs and veneers come to Indonesia via Germany and Canada and are further distributed by local importers and their distributors. Most of the importers sell the imported materials to small and medium scale furniture and guitar makers in smaller volumes, as well as to independent interior designers, architects and contractors for upscale boutique hotels & resorts, restaurants and cafes, offices, apartments and residences for locals & expatriates and embassies.

Imported wood materials go directly to large scale furniture and woodworking manufacturers, musical instruments producers in Jakarta and Surabaya (East Java) that utilize up to 90 percent imported woods including from the United States. Most these manufactures have their own wood processing facilities from log to lumber to veneer cutting machineries. They export 90 to 100 percent of their products to overseas markets, such as the United States, Europe, Japan, and Oceania, with the rest going to local customers.

## Constraints

Advantages and Challenges for U.S. Hardwood Products in Indonesia:

Advantages	Challenges (Barriers to US Export)
The United States is well known for best quality products, consistent supply, and detailed grading rules of wood products.	Prices in general are higher compare to other countries and domestic products. U.S. suppliers tend to require large quantity making it difficult for importer to order small quantity of specific species or wood products.
U.S. wood product mostly set trend in any new style/design furniture and woodworking industries.	Some distributors and end consumers are note well versed on woods species and availability of products.
Most U.S. hardwood species do not exist in the country. The furniture and woodworking manufactures rely entirely of imported wood for export purposed.	Industry looks for alternative and less expensive hardwood both domestically and overseas other than U.S products.
No import tariff. Tax exemption for raw materials as considered in bonded zone.	More introductions of various hardwood type and grades as well as new species are required.
Local government supports the industry as most imported wood products will be further processed and exported in form of furniture, woodworking or other products.	The importers have difficulties in obtaining credits for ongoing supplies and stocks.
Shipping time always on-time with products arriving in perfect condition.	U.S. suppliers have limited flexibility in term of credit payments and require advance payment. Long shipping time can be very costly, at least six weeks.
The increasing number of modern department stores/malls, four-five star hotels/resorts, international chain and upscale cafes/ restaurants, luxury apartments and residences for both local consumers and expatriates.	Competition from domestic product as alternative and other countries like Europe, Canada, New Zealand, Africa, South America, Malaysia, and China
Once a long-term relationship has established between U.S. suppliers and local suppliers, importation gets easier.	U.S. suppliers lack of good long-term relationship with local importer or even to their sole agent. Not familiar with local culture, system, and industry.

Importers and manufactures are dependant for any U.S. hardwood and wood products for this industry.	Inconsistency of import regulations, procedures, and custom clearance continue to be a major constrain for U.S. hardwood and wood products to enter this market.
---	--

U.S. lumbers suppliers typically ask for payment in advance or credit at delivery time. There are no local banks or financial institutions to assist in credit-terms.

The export market in North America requires a credit-term payment from 45-75 days. It takes 115 – 165 days for local manufactures to receive payments as well as the need of 10 days for processing import clearance and other documentations for raw materials, a minimum of 42 days for productions and 32 days for shipping.

A lack of raw materials results in higher production costs. The export market requires specific species that end consumers are familiar with. The availability of both local and imported materials is very inconsistent due to GOI regulations and certifications.

The other problem is the lack of a distribution system outside Java. Both imported raw materials and end products become very expensive along with unreliable shipping companies. Therefore, import and export activities are concentrated only in Jakarta and few other major cities in Java and Bali.

Poor infrastructure, to include inconsistent supplies of electricity results in shutdowns of computerized machines. These kinds of challenges delay and eventually lower the production capacity.

Lack of GOI knowledge on differentiating U.S. wood and veneers of higher grades like walnut, cherry, and other sophisticated species set back custom and import clearance up to 14 days. Prior to 2000, the approved SGS system was used to speed up the clearance process.

## **Competition**

Red oak veneer from China has been imported at the rate of 120,000 M<sup>2</sup> (\$132,000) per year by a single woodworking industry. Although the price is 10-15 percent less than U.S. products, the quality is lower and more unreliable.

Plywood imports originated from Malaysia and China as the Indonesian production dropped dramatically by 50 percent in the past decade. Chinese plywood productions jumped from 4.4 million CuM in 1998 to 35 million CuM in 2007. Chinese plywood mainly consists of poplar (*Liriodendron spp.*). Softwood (5-7 years, diameter 30 cm) begins to replace expensive and hardwood shortage for plywood from Malaysia so the price becomes very competitive.

Other products like pine from New Zealand is used at 7,200 CuM/year and rubber-wood particle board from Malaysia and Thailand at 3,000 CuM/year for woodworking manufacture.

Domestic average wood consumption of 3 million CuM is used by SME furniture industries and several major woodworking industries.

Reconstituted –engineered wood from China is beginning to enter the Indonesian market at the rate of 1

container/year including 0.5mm flexible engineered veneer.

## **Governmental Policy**

Forest concession rights (*HPH-Hak Pengusahaan Hutan*) are strictly assessed and monitored. In 2010, 291 unit managements were granted HPH covering 26.69 million ha. Also during 2010, 121 of HTI unit managements were allowed to manage 8.78 million ha. These 412 management units are responsible for 35.48 million ha area. Within this area, any logging activities can only be carried out in compliance with the approved annual work plans (*RKT -Rencana Kerja Tahunan*).

The MOF requires the industry to perform selective cutting, as log diameter should be greater than 30 cm, replant with the same wood species, and pay reforestation fund and Forest Royalty Fund. The implementation of this requirement has been inconsistent.

An official certificate of origin should accompany every log that has been cut. Logging permits and eco label certificates are granted only if all requirements were met. These certificates are important for international markets for logs, lumber, furniture and woodworking industries to guarantee that the products come from sustainable forest/wood management practices and use of legal logs.

Illegal logging and log exports are common practices in most Indonesian forests. Inconsistent regulation enforcement by the GOI results in unsustainable sources of raw materials for the entire industry. High fluctuations of local hardwoods prices of grade A3 teak (diameter 30-39 cm) through auctions can double in less than a month from \$300 to \$660. Therefore industry trends over the past several years indicate a greater preference for imported hardwoods. In response, the GOI has exempted logs, lumber, and veneer imports from import duties and other fees. The normal ten percent PPN sales tax is applicable for any end product.

## **Forecast and Future Development**

Large industries currently turn to imported materials in order to avoid obtaining certificates of origin, eco labels, and FSC required by foreign buyers. This process is time consuming, expensive and makes Indonesian products less competitive in international markets. Imported materials give the assurance of the industry using legal woods which make the products easily accepted by high standard export markets.

The ASMINDO, ISWA, high end furniture and woodworking industries aggressively promoting their products in international markets by participating in international wood products exhibitions targeting other Asian countries, Africa, Middle East and Eastern Europe. In addition, there is a possibility of adding or substituting new species available overseas into the production lines. They expect a steady growth of 20 to 30 percent each year through 2015.

New technologies in producing more durable products for outdoor and other constructions seem to increase in the near future especially in Europe. The consumer demand remains high regardless of 2 percent increase in price as long as the products are of prime quality and meet the FSC standard.

## **Recommendations**

- Indonesian importers could make more use of credit offered by USDA though credit guarantee programs (GSM).
- Buying missions for Indonesian importers/distributors, major flooring, furniture and woodworking manufacturers to visit U.S. suppliers. This is important for Indonesian buyers to become familiar with various species, grades, and applications.
- Industry sponsored educating/training local architects, designers, and contractors on U.S. wood product applications and characteristics of various available U.S. species should continue.
- Encourage and support Indonesian importers and distributors to participate in trade shows conducted by AHEC or local furniture exhibitions. These activities may benefit the importers in identifying potential distributors and agents.

PENDIX A

LIST OF U.S. HARDWOOD & SOFTWOOD SPECIES IMPORTED INTO INDONESIA

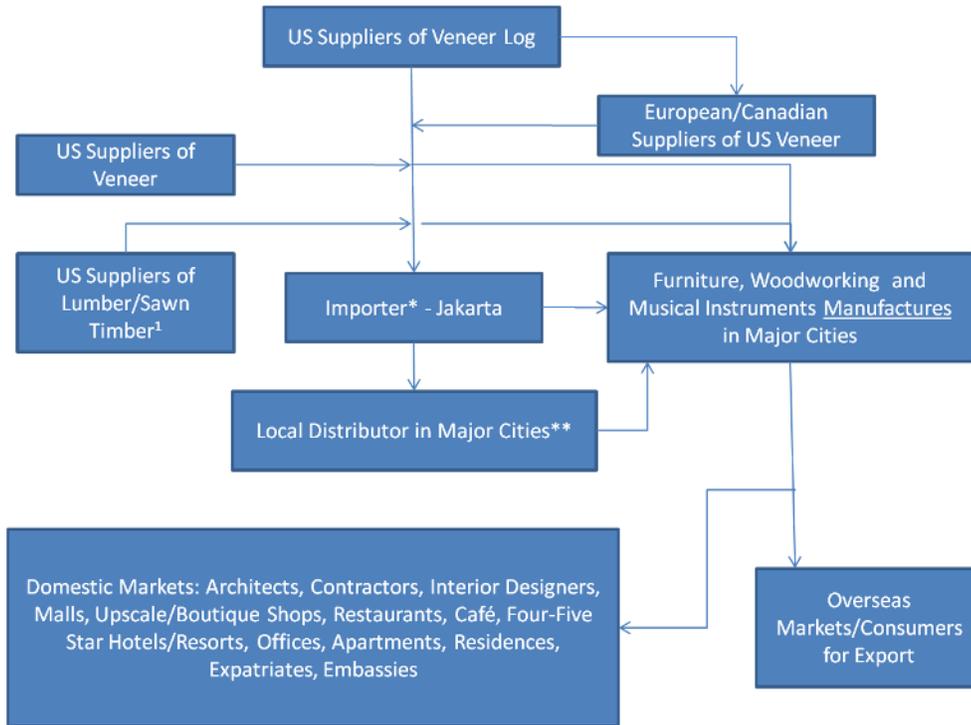
Type of Wood Product	End Product Type	U.S. Wood Species (Common Name & Scientific Name)
LOG	Flooring	Red Oak ( <i>Quercus</i> spp.) White Oak ( <i>Quercus</i> spp.) Walnut ( <i>Juglans</i> spp.)
LUMBER/ SAWN TIMBER	Flooring	Ash ( <i>Fraxinus</i> spp.) Cherry ( <i>Prunus serotina</i> ) Hard Maple ( <i>Acer saccharum</i> , <i>Acer nigrum</i> ) Red Oak ( <i>Quercus</i> spp.) White Oak ( <i>Quercus</i> spp.) Pecan ( <i>Carya</i> spp.) Pine ( <i>Pinus</i> spp.); Walnut ( <i>Juglans</i> spp.)
	Doors Furnitures: cabinets, vanities, bed, chair, bench, etc. Other woodworking	Cherry ( <i>Prunus serotina</i> ) Hard Maple ( <i>Acer saccharum</i> , <i>Acer nigrum</i> ) Red Oak ( <i>Quercus</i> spp.) White Oak ( <i>Quercus</i> spp.) Poplar /Tulip wood ( <i>Liriodendron tulipifera</i> ) Walnut ( <i>Juglans</i> spp.)
	Musical instruments: guitar and piano	Maple ( <i>Acer</i> spp.) Spruce ( <i>Picea</i> spp.) Alder ( <i>Alnus</i> spp.)
VENEER	Furniture	Red Alder ( <i>Alnus rubra</i> ) Beech ( <i>Fagus grandifolia</i> ) Birch ( <i>Betula</i> spp.); White & Red Birch Cherry ( <i>Prunus serotina</i> ) Elm ( <i>Ulmus</i> spp.) Maple ( <i>Acer saccharum</i> , <i>Acer nigrum</i> ) Red Oak ( <i>Quercus</i> spp.) White Oak ( <i>Quercus</i> spp.) Pecan ( <i>Carya</i> spp.)

		Pine ( <i>Pinus spp.</i> ); Oregon Pine Sycamore ( <i>Platanus occidentalis</i> ) Black Walnut ( <i>Juglans nigra</i> )
	Musical instruments: guitar and piano	Cherry ( <i>Prunus serotina</i> ) Maple ( <i>Acer saccharum</i> , <i>Acer nigrum</i> ) Walnut ( <i>Juglans spp.</i> )

Source: Data collected from FAS USDA survey of importers, woodworking, furniture manufacturers, in Jakarta Oct--Dec, 2010

## APPENDIX B

### Distribution System for U.S. Veneer Log, Veneer, and Lumber



**Note:**

\*Many importers and manufactures have their own veneer (and/or lumber) processing plants. The large manufactures directly import U.S. veneer logs, veneers, lumber/sawn timber.

\*\*Major Cities: Jakarta, Semarang (Central Java), Surabaya (East Java), Medan (North Sumatra), and Bali.

<sup>1</sup>Lumbers/sawn timbers are utilized by furniture, wood floor, doors, and other woodworking manufactures for over 90% export consumers and about 10% local buyers. Majority of large manufactures and woodworking industries produce 100% for export markets.

## APPENDIX C

### Indonesian Import Value of Hardwood and Softwood\* in 2008

WOOD PRODUCT	Value (Million USD)	Weight (Million Kg)
HARDWOOD		

Logs, Oak ( <i>Quercus spp</i> )	12.02	30.7 (25,631 CuM)
Logs, Beech ( <i>Fagus spp</i> )	0.48	1.0 (2,632 CuM)
Logs, non-coniferous	2.3	7.9 (7,694 CuM)
Poles, piles etc, non-coniferous, pointed, not sawn	0.23	0.6
Lumber, Meranti red, Meranti Bakau, White Lauan etc	8.02	12.1 (7,829 CuM)
Lumber, Okoume, Obeche, Sapelli/Sipo/Acajou/Makore/etc.	2.32	2.2
Lumber, <i>Baboen</i> , Mahogany, Imbuia, Balsa	0.29	0.2 (274 CuM)
Lumber, Oak ( <i>Quercus spp</i> )	16.8	22.8 (19,985 CuM)
Lumber, Beech ( <i>Fagus spp</i> )	1.95	2.8 (3,642 CuM)
Lumber, non-coniferous	36.77	44.2 (50,817 CuM)
Veneer or ply sheet, tropical woods, <6 mm thick	4.58	3.3
Veneer,ply sheet, not conifer or tropical, <6 mm thick	16.41	8.1
Non-conifer wood continuously shaped along any edges	1.19	1.1
Total	103.36	
<b>SOFTWOOD</b>		
Poles, piles etc, coniferous, pointed but not sawn	0.91	0.2
Lumber, coniferous (softwood) thickness < 6 mm	61.23	108.6 (199,058 CuM)
Veneer or ply sheet, coniferous (softwood) <6 mm thick	11.00	9.8
Coniferous wood continuously shaped along any edges	1.13	1.1
Total	74.27	

\*Data exclude plywood products. Source: UN COMTRADE Data

## POST CONTACT AND FURTHER INFORMATION

The U.S. Foreign Agricultural Service in Jakarta maintains up-to-date information covering food and agricultural import opportunities in Indonesia and would be pleased to assist in facilitating U.S. exports and entry to the Indonesia market. Questions or comments regarding this report should be directed to FAS Jakarta at the following address:

**U.S. Department of Agriculture**  
**Foreign Agricultural Service**  
U.S. Embassy Jakarta  
Jalan Medan Merdeka Selatan No. 5  
Jakarta 10110 - Indonesia  
Tel: +6221-3435-9161  
Fax: +6221-3435-9920

E-mail: [agjakarta@fas.usda.gov](mailto:agjakarta@fas.usda.gov)

Homepage: <http://www.fas.usda.gov>; <http://www.usdaindonesia.org>

Please contact our home page for more information on exporting U.S. food products to Indonesia, including Exporter Guide: Indonesia; Food Processing Sector Report: Indonesia; The Retail Sector Report: Indonesia; The HRI Food Service Sector Report: Indonesia; Market Brief: Market Brief – Bakery Products Ingredients; Market Brief – Snack Products Ingredients; Market Brief – Healthy Beverage Ingredients; Market Brief – Processed Chilled and Frozen Meat, Chicken and Fish Products Ingredients, and Market Brief - Wine.

For more information on exporting U.S. agricultural products to other countries, please visit the Foreign Agricultural Service's Home Page: <http://www.fas.usda.gov>